

Attorney Docket No. 9624-000001CPA

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GP2851

THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Group Art Unit: 2851 )  
)  
Examiner: J.K. Han )  
)  
Inventor: Igor Alexeff )  
)  
Serial No.: 09/218,763 )  
)  
Filed: 12/22/98 )  
)  
For: IMAGE VIEWING DEVICE )

OCT 26 2000

TECHNOLOGY CENTER 2800

TRANSMITTAL OF  
REVISED APPEAL BRIEF

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

CERTIFICATE OF MAILING

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By Preston H. Smirman

Sir:

Enclosed herewith are the original and two copies of Appellant's Revised Appeal Brief for the above identified application.

If for some reason Appellant has inadvertently paid an insufficient fee to prevent the abandonment of this application, please charge our Deposit Account No. 08-0750 for any further fees which may be due. A duplicate copy of this letter is enclosed for this purpose.

Respectfully submitted,

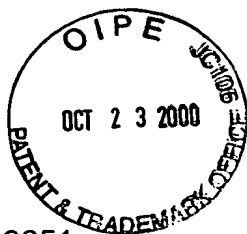
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES



ATTORNEY DOCKET NO. 9624-000001CPA

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OCT 26 2000

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Art Unit: 2851 )  
)  
Examiner: J. K. Han )  
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Inventor: Igor Alexeff )  
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Serial No.: 09/218,763 )  
)  
Filed: December 22, 1998 )  
)  
For: IMAGE VIEWING DEVICE )

REVISED  
APPEAL BRIEF

**CERTIFICATE OF MAILING**

***I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Commissioner of Patents and Trademarks, Washington, D.C. 20231 on***

*October 18, 2000*  
**By** *Auston H. Smith*

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Dear Sir:

This is an Appeal Brief in response to the Final Office Action mailed January 7, 2000. The Appeal Brief is submitted in triplicate.



## TABLE OF CONTENTS

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Real Party in Interest .....	1
Related Appeals and Interferences .....	1
Status of Claims .....	1
Status of Amendments .....	1
Summary of the Invention .....	1
Summary of the References Cited .....	2
Statement of the Issue, Presented .....	2
Grouping of the Claims .....	3
Arguments Regarding 35 U.S.C. 112, First Paragraph Rejection .....	3
Arguments Regarding the 35 U.S.C. 112, Second Paragraph Rejection .....	6
Conclusion .....	6
APPENDIX .....	8
Copy of the Claims Appealed .....	8



## TABLE OF AUTHORITIES

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OCT 26 2000

TECHNOLOGY CENTER 2800

### CASES

<i>Ex parte Parks</i> , 30 U.S.P.Q. 2d 1234 (B.P.A.I. 1994)-----	3
<i>In re Gay</i> , 309 F.2d 769, 135 U.S.P.Q. 311, 316 (CCPA 1962)-----	3
<i>In re Moore</i> , 439 F.2d 1232, 169 U.S.P.Q. 236, 238-239 (CCPA 1971)-----	4
<i>In re Newton</i> , 414 F.2d 1400, 1406, 163 U.S.P.Q. 34, 39 (CCPA 1969)-----	3
<i>In re Skrivan</i> , 427 F.2d 801, 166 U.S.P.Q. 85, 88 (CCPA 1970)-----	4
<i>In re Smythe</i> , 480 F.2d 1376, 178 U.S.P.Q. 279, 284 (CCPA 1973)-----	3

### Real Party in Interest

As the instant patent application is unassigned, the real party in interest is the inventor, Igor Alexeff.

### Related Appeals and Interferences

There are no related appeals or interferences.

### Status of Claims

In response to the amendment mailed October 25, 1999, claims 1, 2, 4-9, 11, 13-19 and 21-24 were finally rejected in the Official Action mailed January 12, 2000. This appeal is taken as to claims 1, 2, 4-9, 11, 13-19 and 21-24, as presently pending.

### Status of Amendments

No amendment has been filed in response to the Final Office Action.

### Summary of the Invention

An image viewing device (see Page 7, lines 10-11 and Fig. 3, Ref. 30; Page 8, lines 5-9 and Fig. 4, Ref. 40; Page 10, lines 3-5 and Fig. 5, Ref. 50; Page 10, lines 14-16 and Fig. 6, Ref. 50; Page 12, lines 8-10 and Fig. 7, Ref. 30; Page 14, lines 13-15 and Fig. 10, Ref. 40; Page 15, lines 16-19 and Fig. 11, Ref. 50; and Page 18, lines 19-23 and Fig. 12, Ref. 100), comprising:

a member (see Page 7, line 11 - Page 8, line 4 and Fig. 3, Ref. 32; Page 8, lines 5-13, Fig. 4, Ref. 42; Fig. 4A, Ref. 42; Fig. 5, Ref. 42; Fig. 6, Ref. 42; Fig. 7, Ref. 32; Fig. 8, Ref. 42; Fig. 9, Ref. 42; Fig. 10, Ref. 42; Fig. 11, Ref. 42; and Page 18, lines 19-

23 and Fig. 12, Ref. 102), having an area defining an aperture (see Page 7, line 11 - Page 8, line 4 and Fig. 3, Ref. 34; Page 8, lines 5-13 and 18-22 and Fig. 4, Ref. 44; Fig. 4A, Ref. 44; Fig. 5, Ref. 44; Fig. 6, Ref. 44; Fig. 7, Ref. 34; Fig. 8, Ref. 44; Fig. 9, Ref. 44; Page 14, lines 13-22 and Fig. 10, Ref. 44; Fig. 11, Ref. 44; and Page 18, lines 19-23 and Fig. 12, Ref. 104), the light rays from the image entering through the aperture; and

an optical block (see Page 7, line 14 - Page 8, line 4 and Fig. 3, Ref. 36; Page 8, line 5 - Page 9, line 3 and Fig. 4, Ref. 46; Fig. 5, Ref. 46; Fig. 5, Ref. 46; Fig. 6, Ref. 46, Fig. 7, Ref. 36; Fig. 8, Ref. 46; Fig. 9, Ref. 46; Page 14, line 13 - Page 15, line 4 and Fig. 10, Ref. 46; Fig. 11, Ref. 46; and Page 18, line 19 - Page 19, line 18 and Fig. 12, Ref. 106) comprised of a refractive material, the optical block being located adjacent to the aperture, the optical block being capable of compressing the light rays from the image that pass through the aperture so as to produce an image comprising at least a 180° field of view, is claimed.

#### Summary of the References Cited

No references were cited.

#### Statement of the Issues Presented

Are Applicant's claims to an image viewing device, as recited in claims 1, 2, 4-9, 11, 13-19 and 21-24, unpatentable as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention?

Are Applicant's claims to an image viewing device, as recited in claims 11 and

19, unpatentable as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention?

#### Grouping of the Claims

For purposes of this appeal, claims 1, 2, 4-9, 11, 13-19 and 21-24 stand or fall together.

#### Arguments Regarding The 35 U.S.C. 112, First Paragraph Rejection

Claims 1, 2, 4-9, 11, 13-19 and 21-24 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

An application need not contain a word-for-word description of the claimed invention to satisfy the written description requirement. All that is required is that the application reasonably convey the claimed subject matter. *Ex parte Parks*, 30 U.S.P.Q. 2d 1234 (B.P.A.I. 1994).

The written description requirement does not require the claims to correspond to specific embodiments described in the specification. The general rule, particularly for inventions in predictable arts, is that an applicant may be allowed claims that cover more than the specific embodiments shown, if the prior art permits. *In re Newton*, 414 F.2d 1400, 1406, 163 U.S.P.Q. 34, 39 (CCPA 1969). Thus, the written description requirement may still be satisfied even if claims cover more than what is described in the specification. *In re Smythe*, 480 F.2d 1376, 178 U.S.P.Q. 279, 284 (CCPA 1973).

The written description requirement generally requires the applicant to describe

the invention to one of ordinary skill in the art, in that not every last detail has to be described. *In re Gay*, 309 F.2d 769, 135 U.S.P.Q. 311, 316 (CCPA 1962).

A patent application is required to contain a written description of the invention only with respect to the claimed subject matter. Accordingly, the written description requirement does not apply to features of an invention that are not included in the claim section of the patent application. See *In re Moore*, 439 F.2d 1232, 169 U.S.P.Q. 236, 238-239 (CCPA 1971). Similarly, the specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. See *In re Skrivan*, 427 F.2d 801, 166 U.S.P.Q. 85, 88 (CCPA 1970).

The Examiner asserted that it is patently clear that every embodiment of the outstanding disclosure (with the possible exception of the embodiment of Fig. 10) is incapable of capturing an image field of at least 180 degrees.

Initially, the Examiner's focus on enablement of all the embodiments is misdirected. Only one embodiment of the present invention needs to disclose an apparatus for capturing an image field of at least 180 degrees to satisfy the requirements of 35 U.S.C. 112, first paragraph. Because the Examiner stated that the embodiment of Fig. 10 arguably supports the claimed subject matter, the Applicant will focus on this particular embodiment for the sake of brevity.

Generally speaking, the present invention is directed to an image viewing device that is capable of producing images comprising at least a 180 degree field of view (i.e., a "fisheye" view). With specific reference to the embodiment of Fig. 10, which is similar to the embodiment of Fig. 4, there is shown an optional lens 60, placed in front of an aperture 44, which in turn is in front of an optical block 46 of refractory material. The



optical block 46 is preferably housed in a light-tight enclosure (not shown). The embodiment of Fig. 10, fully disclosed in the specification, produces an image that comprises greater than 180 degree field of view by placing of the lens 60 on the aperture surface opposite that of the optical block 46 . **Thus, the image produced has to be comprised of at least a 180 degree field of view.** This is a simple optical principle, known to one of ordinary skill in the art. The Examiner asserted that the lens 60 is defined as a flat plate of about 10 times the aperture 44 diameter and a thickness about equal to the aperture 44 diameter and thus light striking the edge of this plate will not enter the aperture 44. This is a misinterpretation of the description found in the specification. The reference to a flat plate is merely exemplary and not exhaustive. The specification never defined the lens 60 as being a rectangle with 90 degree angle formed about each corner, as implied by the Examiner. One of ordinary skill in the art would recognize that the lens 60 could be slightly rounded at the edges of the plate while still be considered "flat" as that term is commonly understood in the art. Thus, any incoming light rays, even from an angle greater than 180 degrees, would be bent by the lens 60 towards the aperture 44, and then through the optical block 46. Furthermore, the Applicant submitted rough, hand-drawn informal drawings of the figures that were not perfectly representative of the actual fields of view claimed by the present invention. The Applicant volunteered to submit one or more additional figures, illustrating a more accurate representation of the at least 180 degree field of view of Fig. 10. However, the Examiner declined the Applicant's offer.

Accordingly, the Applicant contends that claim 1 satisfies the requirements of 35 U.S.C. 112, first paragraph, and therefore is patentable.

Further, the Applicant submits that dependent claims 2, 4-9, 11, 13-19 and 21-

24, claims depending from independent claim 1, are likewise patentable

#### Arguments Regarding The 35 U.S.C. 112, Second Paragraph Rejection

Claims 11 and 19 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Applicant does not contest the validity of the 35 U.S.C. 112, second paragraph, rejection of claim 19.

The Applicant does however, submit that claim 11 is not indefinite. Claim 11 merely recites, among other things, a recording means for recording the image produced by a device selected from the group consisting of the optical block, the image intensifying means, and combinations thereof. The focus of the claim is on the recording means and the image produced, not the optical block itself, as asserted by the Examiner. The Examiner was apparently confused that the optical block was being claimed anew in claim 11. This is not the case. What is being claimed is the recording means and the image produced from several sources.

Accordingly, the Applicant contends that claim 11 satisfies the requirements of 35 U.S.C. 112, second paragraph, and therefore is patentable.

#### Conclusion

For the reasons advanced above, appellant respectfully urges that the rejections of claims 1, 2, 4-9, 11, 13-19 and 21-24 under 35 U.S.C. § 112, first paragraph, and the rejection of claim 11 under 35 U.S.C. § 112, second paragraph, are improper. Reversal of the rejections in this appeal is respectfully requested.

Please charge any deficiency in fees due in connection with the filing of this paper to Deposit Account No. 08-0750 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: October 18, 2000

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**APPENDIX**  
***Copy of the Claims Appealed***

1. An image viewing device, comprising:  
a member having an area defining an aperture, the light rays from the image entering through the aperture; and  
an optical block comprised of a refractive material, the optical block being located adjacent to the aperture, the optical block being capable of compressing the light rays from the image that pass through the aperture so as to produce an image comprising at least a 180° field of view.
2. The image viewing device according to claim 1, wherein the optical block has a substantially flat surface facing towards the aperture.
4. The image viewing device according to claim 2, wherein the optical block has a substantially spherical surface opposite the flat surface.
5. The image viewing device according to claim 1, wherein the optical block abuts the member having an area defining an aperture.
6. The image viewing device according to claim 1, wherein an area defining a gap is located between the optical block and the member having an area defining an aperture.

7. The image viewing device of claim 1, further comprising a housing for receiving the optical block, wherein the housing is substantially light tight.

8. The image viewing device of claim 1, further comprising an image detection means, the optical block being located between the aperture and the image detection means, the image detection means being capable of viewing and recording the image produced by the optical block.

9. The image viewing device according to claim 1, further comprising an image intensifying means for intensifying the image produced by the optical block.

11. The image viewing device according to claim 9, further comprising a recording means for recording the image produced by a device selected from the group consisting of the optical block, the image intensifying means, and combinations thereof.

13. The image viewing device according to claim 1, further comprising a cleaning means for cleaning debris from either the aperture or the surface of the optical block facing towards the aperture.

14. The image viewing device according to claim 13, wherein the cleaning means comprises a selectively operable source of compressed air.

15. The image viewing device according to claim 1, further comprising a color filter means for selectively filtering wavelengths of visible light, the color filter means being in proximity to the optical block.

16. The image viewing device according to claim 1, wherein the optical block has an index of refraction in the range of more than about 1.

17. The image viewing device according to claim 1, wherein the optical block has an index of refraction in the range of about 1.5 to about 4.

18. The image viewing device according to claim 1, wherein the aperture has a diameter in the range of about 100 microns to about 1 centimeter.

19. The image viewing device according to claim 1, wherein the optical block is comprised of a refractive material.

21. The image viewing device according to claim 1, wherein a color image is produced.

22. The image viewing device according to claim 1, wherein a monochromatic image is produced.

23. The image viewing device according to claim 1, wherein a black and white image is produced.

24. The image viewing device according to claim 1, wherein a portion of the optical block extends through the aperture, the portion of the optical block extending through the aperture focusing the incoming light rays from the image.